

REMARKS

The Examiner rejected claims 2, 3, 12, 13, 21, and 22 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The Examiner stated:

“The applicant claims that the phase-lock-loop generates a plurality of clock signals that have a frequency that is higher than the frequency of the reference clock signal. However, the examiner can not find any disclosure of this feature in the specification. At most, the applicant discloses that the frequency of the clock signals generated by the phase-lock-loop is ‘approximately equal to the frequency of the first electrical signal 315’ page 8 lines 5-12 in the specification.”

Applicants believe that the phrase “approximately equal” includes both “higher than” and “lower than.” However, to facilitate the prosecution of the patent application, Applicants have revised claims 2, 3, 12, 13, 21, and 22 to include the requirement that the “phase-locked-loop is operable to generate a plurality of clock signals that have a frequency that is approximately equal to the frequency of the reference clock signal.”

The Examiner rejected claims 1 – 19 under 35 U.S.C. § 103(a) as being unpatentable over the prior art admitted by Applicant, Figure 2 of the patent application, in view of U.S. Patent Application Publication Number 2002/0093994 to Hendrickson. In that regard, the Examiner stated:

“The prior art differs from the claimed invention in that the prior art fails to specifically teach that the second latch-decision circuit coupled to the clock-recovery circuit. However, coupling a plurality of latches to a single clock-recovery circuit is well known in the art. Hendrickson, in the same field of optical receivers, teaches coupling a plurality of latches to a single clock recovery circuit (Figure 14). One skilled in the art would have been motivated to couple a plurality of latches to a single clock-recovery circuit in order to reduce the overall complexity and expense of the receiver circuit. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to couple a plurality of latches to a single clock-recovery circuit as taught by Hendrickson.”

Figure 14 of Hendrickson is reproduced below:

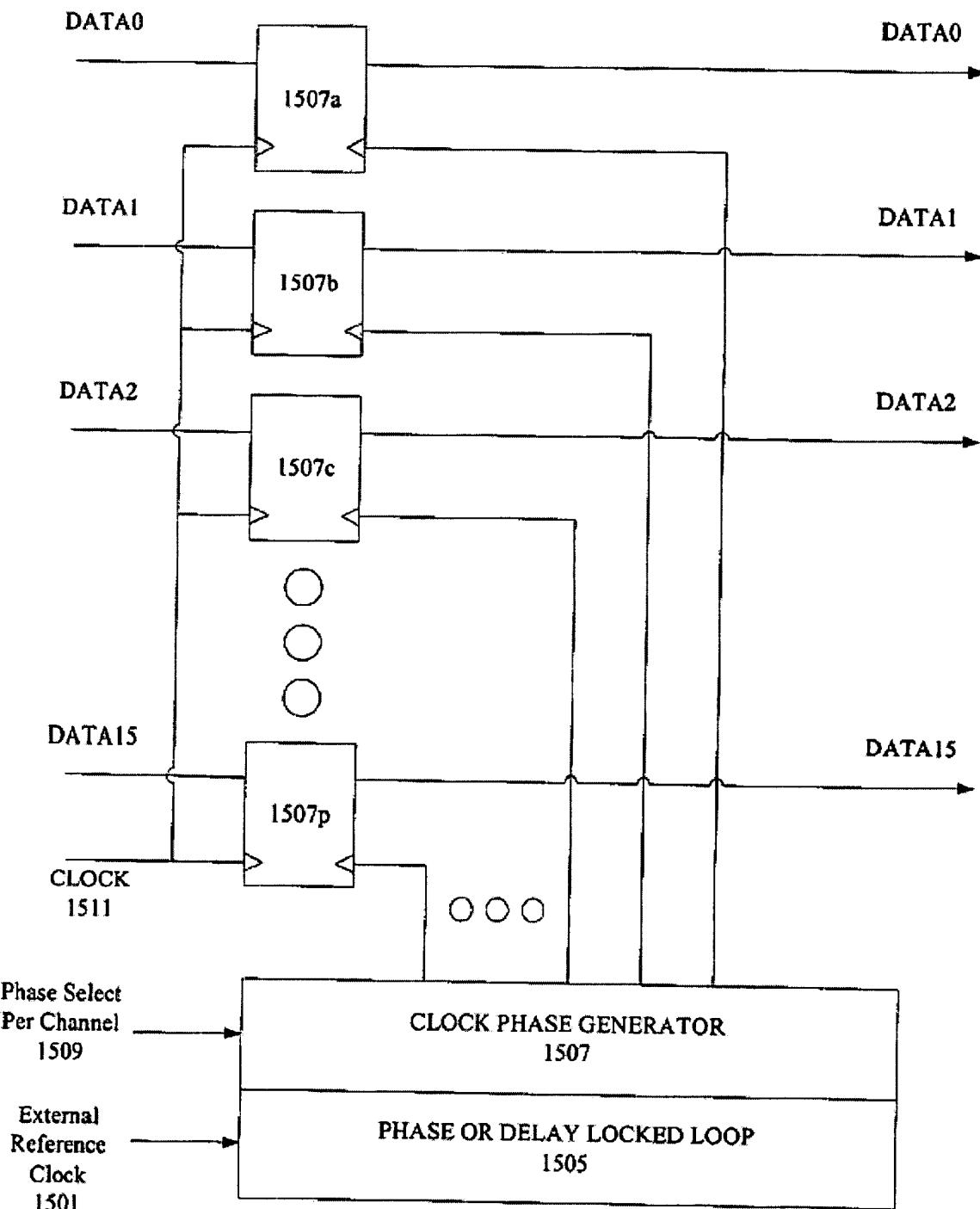


FIG. 14

The Examiner correctly states that Hendrickson "teaches coupling a plurality of latches to a single clock recovery circuit." However, claim 1 requires that the clock-recovery circuit be coupled to a first latch-decision circuit and a second latch-decision circuit. Specifically, element

(d) of claim 1 requires “a first latch-decision circuit, the first latch-decision circuit coupled to the clock-recovery circuit” and element (g) of claim 1 requires “a second latch-decision circuit, the second latch-decision circuit coupled to the clock-recovery circuit.” The meaning of the phrase “latch-decision circuit” is discussed in the Applicants’ specification:

“The latch-decision circuit 125 is operable to determine, using algorithms known in the art, an appropriate time to latch the electrical signal 115 so that the electrical signal 115 is sampled near the center portion of each pulse that corresponds to either logic ‘1’ or logic ‘0.’ Such a determination is based upon the timing information that is received from the clock-recovery circuit 120 and information extracted from the electrical signal 115.” Specification, p. 2, ln. 23 – p. 3, ln. 5.

The clock phase generator 1507 of Hendrickson is coupled to a plurality of latches 1507a-p, not to a plurality of latch-decision circuits as required by claim 1. Thus, neither Hendrickson nor Applicants’ admitted prior art teach a clock-recovery circuit coupled to a first latch-decision circuit and a second latch-decision circuit. As a result, Applicants believe that claim 1, together with dependent claims 2 – 10, are allowable over the art of record. For the identical reasons discussed above, Applicants also believe that claim 11, together with dependent claims 12 – 19, are allowable over the art of record.

In the Examiner’s rejection under 35 U.S.C. § 103(a), the Examiner stated:

“One skilled in the art would have been motivated to couple a plurality of latches to a single clock-recovery circuit in order to reduce the overall complexity and expense of the receiver circuit. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to couple a plurality of latches to a single clock-recovery circuit as taught by Hendrickson.”

Applicants do not believe that the Examiner has presented a proper basis for combining Applicants’ admitted prior art with Hendrickson. As the Examiner is aware, Section 706.02(j) of the MPEP states that one of the requirements for a *prima facie* case of obviousness is “there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify or combine reference teachings.” The Examiner stated that the motivation to combine the two references is “in order to reduce the overall complexity and expense of the receiver circuit.” Applicants submit that the Examiner’s stated standard for combining unrelated references does not comply with MPEP 706.02(j).

The Applicants do not understand if the Examiner alleges that Applicants' admitted prior art provides a motivation to combine the admitted prior art with Hendrickson or if the Examiner alleges that the knowledge generally available to one of ordinary skill in the art would provide the motivation to combine.

Regarding whether Applicants' admitted prior art provides a motivation to combine the admitted prior art with Hendrickson, Applicants do not believe that the admitted prior art provides any such motivation. If the Examiner is aware of any such motivation, Applicants request that Examiner provide Applicants with that statement.

Regarding whether the knowledge generally available to one of ordinary skill in the art provides a motivation to combine Applicants' admitted prior art with Hendrickson, Applicants are not aware of any such knowledge. If the Examiner is aware of any such knowledge, Applicants request that the Examiner indicate the source of the knowledge so that Applicants can have a fair opportunity to provide a proper response.

The Examiner rejected claims 20 – 28 under 35 U.S.C. § 103(a) as being unpatentable over the prior art admitted by Applicant, Figure 2 of the patent application, in view of U.S. Patent Number 6,718,143 to Wijntjes. In that regard, the Examiner stated:

"The prior art admitted by the applicant differs from the claimed invention in that it fails to specifically teach that the latch is operable to receive the first electrical signal and the second electrical signal. However, single latch units are well known in the art. Wijntjes in the same field of endeavor, teaches it is well known that single latch units which receive a plurality of inputs are well known in the art (see 'LATCH' in Figure 3.) One skilled in the art would have been motivated to include a single latch unit as taught by Wijntjes in the device of the prior art admitted by the applicant in order to reduce the overall cost and complexity of the receiver. Therefore it would have been obvious to one skilled in the art at the time the invention was made to use a single latch as taught by Wijntjes in the device of the prior art admitted by the applicant."

Figure 3 of Wijntjes is presented below:

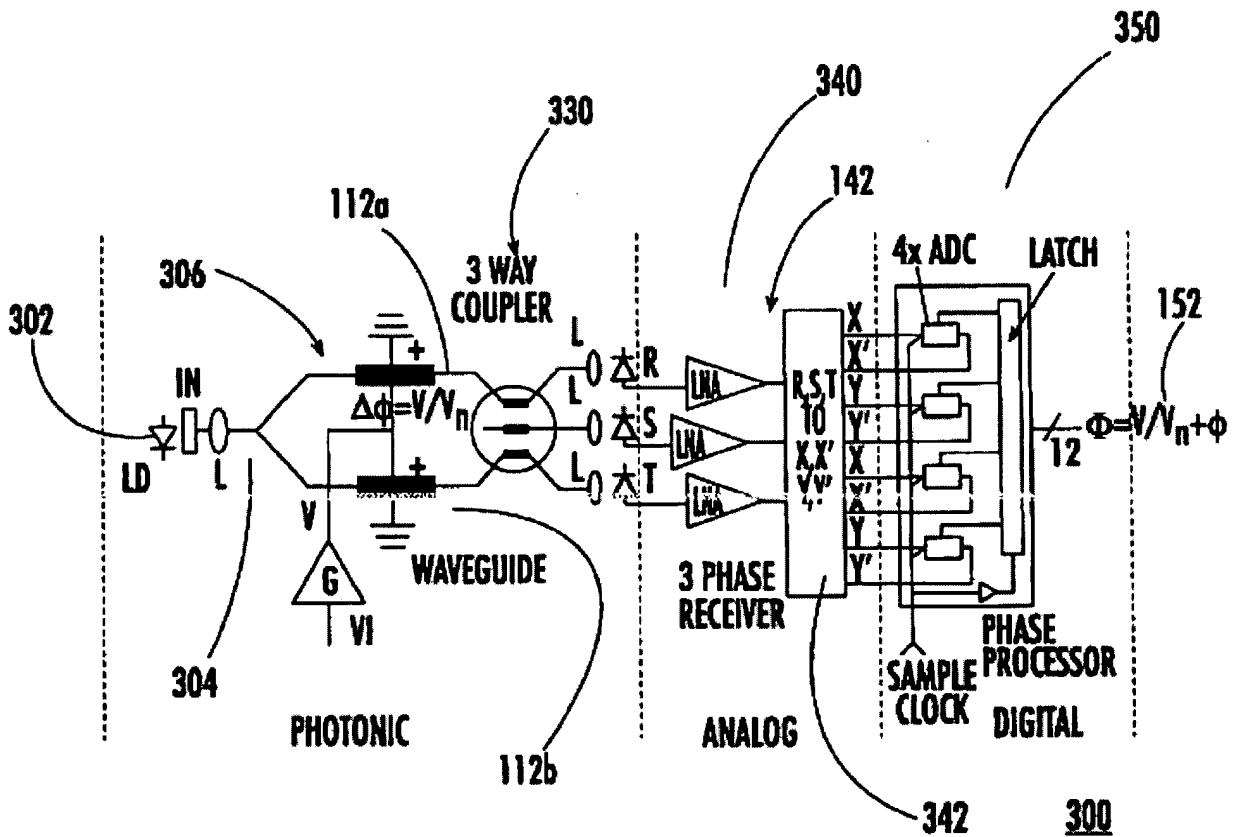


FIG. 3.

The Examiner correctly states that Wijntjes teaches a latch that receives a plurality of inputs. However, claim 20 requires a multi-input “latch coupled to the latch-decision circuit.” (See element f.) Wijntjes does not disclose such a coupling. Instead, the latch of Wijntjes is coupled to a clock. (See “SAMPLE CLOCK” in Figure 3 of Wijntjes.) This is very different from what is required by claim 20. The clock of claim 20 is received by a phase-locked-loop, not by the latch. As the Examiner is aware, it is impermissible, within the framework of 35 U.S.C. § 103, to pick and choose from any one reference only so much of it as will support a position, to the exclusion of other parts necessary to the full appreciation of what such a reference fairly suggest to one of ordinary skill in the art. *Bausch & Lomb, Inc. v. Barnes-Hind, Inc.*, 796 F.2d 443, 230 U.S.P.Q. 416 (Fed. Cir. 1986); *In re Hedges*, 783 F.2d 1038, 228 U.S.P.Q. 685 (Fed. Cir. 1986). As a result, Applicants believe that claim 20, together with dependent claims 21 – 28, are allowable over the art of record.

For the same reasons discussed with respect to Hendrickson above, Applicants do not believe that the Examiner has presented a proper basis for combining Applicants' admitted prior art with Wijntjes. Thus, Applicants request that the Examiner indicate the source of the motivation to combine Applicants' admitted prior art with Wijntjes so that Applicants can have a fair opportunity to provide a proper response.

CONCLUSION

It is submitted that the present application is presently in form for allowance. Such action is respectfully requested.

Respectfully submitted,

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